

I have two or three new namesakes among my Gap captures, but modesty forbids my enlarging upon these. One wet chilly day I started for a walk; but my net was soon useless, being soaking wet, and insects were scarce. I decided to give it up and return home. As I passed a low dwarfed sycamore I caught sight of an odd-looking lump on a leaf and knocked it into my damp net. It was a large Membracid new to me, and I sent it to Mr. Van Duzee. The very next day I received a letter from him telling me that this was a long lost species of Walker's, which he had never before seen, and that it settled a doubtful point for him as to the identity of another species described by himself. I was, of course, filled with joy and pride over my rare unique. But, a day or two after, a note from Mr. Van Duzee told me that, after hearing from me that the insect in question was found on sycamore, he had searched such trees and—found two specimens of the bug, right in the suburbs of Buffalo! He secured but one of the two, the other escaping from the net. I tried hard to sympathize with the loser, but fear I felt selfishly resigned to the thought that he now had no more than I had—just one. But a little later my second specimen was secured and now I earnestly hope that at least one more Buffalo bug of this sort will fall into the net of my good friend, the Hemipterist.

I was going to tell you of some other interesting captures made in this same locality, Odonata, Diptera and Orthoptera, but that story must wait till another time. However, I can assure you that I heartily agree with the ambitious bellboy, fresh from the country academy, who, after looking at a box of my insect treasures, exclaimed, "The Water Gap must be a very insectivorous place."

New West Indian Gall Midges (Dipt.).

By E. P. FELT, Albany, New York.

The following descriptions of new species are based upon material received during the past year from St. Vincent, W. I. The most interesting form is *Bruggmanniella pisoniae*, remarkable because of its presenting a combination of characters found

in *Schizomyia* and *Asphondylia*, and in being a form approximately intermediate between *Schizomyia* and *Cincticornia*.

***Bruggmanniella pisoniae* n. sp.**

The interesting midge described below was reared May 5, 1911, by Mr. W. H. Patterson, St. Vincent, W. I., from stems of *Pisonia nigricans*.

Gall. The affected young stems show irregular elevations about 4 mm. long, each marking an oval cell some 3 mm. long. These cells are numerous, 8 or 10 occurring on a piece of stem some 4 cm. long and only about .5 cm. in diameter.

Larva. Length 2 mm., rather slender, yellowish orange. Head moderately broad, retracted. Antennae short, stout, apparently bi-articulate. Breastbone apparently wanting. Segmentation distinct, the skin nearly smooth; terminal segment greatly reduced, irregularly conical, with a diameter about three-fourths that of the preceding segment and a length a little greater than its diameter.

Pupa. Length 2.5 mm., moderately stout, yellowish orange; cephalic and thoracic horns minute though distinct. Abdominal segments dorsally with a sparse basal row of moderately stout papillae, each with a chitinous apex, the general surface of the abdominal segments with rather coarse, irregular, chitinous plates; terminal segment with two pairs of submedian, conical processes and minor lateral processes.

Male. Length 1.75 mm. Antennae as long as the body, sparsely short haired, yellowish brown; 14 segments, the fifth with a stem one-fourth the length of the cylindrical basal enlargement, which latter has a length thrice its diameter, a slight constriction near the basal third; basal, subbasal and apical whorls of short, stout setae and high, irregular circumfili closely resembling those of the male *Schizomyia*; terminal segment produced, with a length about four times its diameter, a marked constriction at the basal third and the apex broadly rounded. Palpi: first and second segments short, irregular, the third one-half longer than the preceding, fusiform. Mesonotum dark brown. Scutellum and postscutellum apparently yellowish brown. Abdomen rather thickly haired, dark brown, the genitalia fuscous. Wings hyaline, costa dark brown, the third vein uniting with the margin at the apex of the wing. Halteres yellowish. Coxae and femora basally yellowish, the distal portion of femora and tibiae fuscous straw, the tarsi darker; claws slender, simple, evenly curved, the pulvilli about half the length of the claws. Genitalia: basal clasp segment stout, narrow conical, the apex subacute; terminal clasp segment subapical, its apex pectinate; dorsal plate short, divided, the lobes narrowly oval, coarsely setose; ventral plate short, broadly and roundly emarginate, the short lobes broadly rounded and thickly setose.

Female. Length 1.75 mm. Antennae about as long as the body, rather thickly haired, fuscous yellowish; 14 segments, the fifth with a stem about one-fifth the length of the cylindric basal enlargement, which latter closely resembles that of the male, though the irregular circumfili are not so highly developed as in the opposite sex; terminal segment reduced, sessile, with a length about twice its diameter, obtuse apically. The apex of the abdomen is expanded, bearing several irregularly triangular plates and a moderately short, stout, crooked, setose ovipositor with a distinct subapical enlargement. Other characters practically as in the male. Type Cecid. a2234.

***Mycodiplosis pulvinariae* n. sp.**

Numerous larvae of this midge were found by Mr. W. H. Sands, St. Vincent, W. I., preying upon *Pulvinaria pyriformis*, and the midges reared therefrom were submitted to us through the courtesy of Mr. William H. Patterson of the Agricultural School. The species is allied to *M. coccidivora* Felt, though easily distinguished by the much stouter basal clasp segment in the male and the rather closely spined terminal lobes of the female.

Larva. Length 1.5 mm., yellowish, moderately stout, tapering slightly at both extremities and without a visible breastbone.

Pupa. Length 1.5 mm., salmon-colored, moderately stout. Thoracic horns filiform. Wing cases extending to the second abdominal segment, the anterior and mid-leg cases to the fourth, and the posterior leg cases to the fifth abdominal segment.

Male. Length 1 mm. Antennae one-fourth longer than the body, rather thickly haired, fuscous yellowish; 14 segments, the fifth having stems with a length one-half and one-fourth greater than their diameters, respectively; distal enlargement pyriform, with a length one-fourth greater than its diameter; circumfili moderately long, stout, setae long, stout. Palpi: first segment subquadrate, the second with a length about thrice its diameter, the third and fourth a little shorter than the second and successively more slender. Mesonotum dark brown. Scutellum and postscutellum yellowish. Abdomen fuscous yellowish. Wings hyaline, costa fuscous yellowish. Halteres yellowish. Coxae and femora basally yellowish, the distal portion of femora, tibiae and tarsi mostly dark straw. Claws slender, strongly curved, the anterior unidentate, the pulvilli rudimentary. Genitalia: basal clasp segment rather long, slender; terminal clasp segment relatively short, stout; dorsal plate long, deeply and triangularly incised, the lobes tapering and narrowly rounded apically; ventral plate moderately short, tapering to a narrowly rounded apex.

Female. Length 1 mm. Antennae nearly as long as the body, sparsely haired, fuscous yellowish; 14 segments, the fifth with a stem one-third the length of the cylindric basal enlargement, which latter has a length twice its diameter; circumfili moderately high, setae abundant, stout; terminal segment with a length about two and one-half times its diameter and a short, knoblike process apically. Ovipositor short, the terminal lobes lanceolate, narrowly rounded and apically with an irregular, sparse group of chitinous spines, the latter with a length about equal to half the width of the lobe. Other characters nearly as in the male. Type Cecid. a2233.

***Arthrocnodax meridionalis* n. sp.**

This minute midge, easily separated from *A. abdominalis* Felt by the shorter stems of the flagellate antennal segments in the male, was reared May 7, 1911, by Mr. W. H. Patterson, St. Vincent, W. I., from open *Eriophyes* galls on the leaves of *Ruellia tuberosa* Linn. and doubtless preys upon the mites. A similar, if not identical species was obtained by this gentleman May 20, 1911, from *Eriophyes* galls on the leaves and bracts of *Lepidagathis alopecuroidea*. He reared the same species, April 6, 1911, from galls of *Eriophyes gossippii* on Sea Island Cotton and also on April 18th from mite galls on the leaves of a species of *Eupatorium*.

Larva. Length 1 mm., apparently yellowish, slender, the diameter being only one-fifth that of the length. Head and anterior body segments greatly produced, the former extensile and with a length about thrice its diameter. Antennae long, slender, curved, with a length about half the head; mouth-parts fuscous; the body segments with a transverse row of tubercles, each bearing a long, stout seta with a length about half the body diameter; terminal segment broadly rounded and with several sublateral setose tubercles. Pseudopods occur on the third to twelfth segments.

Male. Length .6 mm. Antennae one-fourth longer than the body, thickly haired, yellowish brown; 14 segments, the fifth with stems having a length respectively one and one-half and one and one-fourth times their diameters; distal enlargement subglobose, the whorls of setae thick, long, the circumfili moderately stout. Palpi slender, the first and second segments quadrate, with a length one-half greater than the diameter, the third and fourth nearly equal, each with a length twice the diameter; mouth-parts somewhat produced, with a length one-half that of the head. Mesonotum reddish brown. Scutellum, postscutellum and abdomen probably yellowish. Wings hyaline, costa

light straw. Halteres yellowish. Legs a variable yellowish straw, the pulvilli as long as the slender claws. Genitalia: basal clasp segment long, stout; terminal clasp segment slender, swollen; dorsal plate broadly and triangularly emarginate, the ventral plate long, rather broad.

Female. Length .6 mm. Antennae nearly as long as the body, sparsely haired, yellowish; 14 segments, the fifth with a stem one-third the length of the cylindrical basal enlargement, which latter has a length twice its diameter; terminal segment somewhat reduced, with a length one-half greater than its diameter, broadly rounded apically. Ovipositor as long as the body, stout, the lobes narrowly oval and sparsely setose. Type Cecid. a2235.

Hyperdiplosis producta n. sp.

This species was reared by Mr. W. H. Patterson, St. Vincent, W. I., from presumably mite galls in the inflorescence of *Stachytarpha jamaicensis*. It is provisionally referred to this genus.

Male. Length .75 mm. Antennae one-fourth longer than the body, thickly haired, yellowish; 14 segments, the fifth having the two stems with a length, respectively, twice and thrice their diameters. Distal node pyriform, each enlargement with a coarse whorl of stout setæ, the circumfili slender; terminal segment produced, the distal enlargement cylindrical, with a length thrice its diameter and apically a slender, fingerlike process. Palpi: first segment subquadrate, the second with a length three and one-half times its diameter, the third probably as long as the second, the fourth probably one-half longer, somewhat dilated. Mesonotum, scutellum and postscutellum yellowish. Abdomen greenish yellow. Wings hyaline, costa light straw. Halteres yellowish. Legs pale straw; claws stout, strongly bent, swollen subapically, pulvilli rudimentary. Genitalia: basal clasp segment long, the slender terminal clasp segment slender, other structures indistinct.

Female. Length 1 mm. Antennae a little longer than the body, sparsely haired, yellowish; 14 segments, the fifth with a stem three-fourths the length of the cylindrical basal enlargement, which latter has a length two and one-half times its diameter: a subbasal whorl of long, stout setae and a subapical band of somewhat smaller setae; terminal segment produced, with a length about thrice its diameter and apically a nearly equally long, tapering process. Ovipositor short, the lobes lanceolate and setose apically. Other characters nearly as in the male. Type Cecid. a2236.

Mr. E. B. Williamson, of Bluffton, Ind., is expected home about April 1 from a collecting trip in British Guiana and Trinidad.